MARINE FIREFIGHTING

| 0008 I | Marine Firefighting | 2 |
|--------------------|--|---|
| 8100 | Policy and Responsibility | |
| 8110 | | 2 |
| 8120 | | 2 |
| 8130 | | 2 |
| 8200 | Response Organization | 4 |
| 8210 | COTP Long Island Sound AOR Fire Response Organization: | 4 |
| 8300 | Marine Firefighting Scenarios | 5 |
| 8310 | Passenger Vessel: | 5 |
| 8310.1 Scenario: | | 5 |
| 83 | 10.2 Shortfalls: | 6 |
| 8320 | | 7 |
| 832 | 20.1 Scenario: | 7 |
| 8320.2 Shortfalls: | | 7 |
| 8330 | EQUIPMENT: Capabilities and Shortfalls | 7 |
| 833 | 30.1 Shortfall for Harbor Areas: | 8 |
| 833 | 30.2 Shortfalls for Lightering Area South Shore Long Island: | 8 |
| 8400 | Marine Firefighting Resources | 8 |
| 8410 | Port/Harbor Area: Coast Guard Assets | 8 |
| | | |

MARINE FIREFIGHTING

8000 Marine Firefighting

8100 Policy and Responsibility

8110 Federal Policy

Although the Coast Guard clearly has an interest in fighting fires involving vessels or waterfront facilities, local authorities are principally responsible for maintaining necessary fire fighting capabilities in U.S. ports and harbors. The Coast Guard will render assistance as available. The Coast Guard maintains this traditional "assistance as available" posture without conveying the impression that the Coast Guard is prepared to relieve local fire departments of the primary responsibility for fire fighting. Paramount in preparing for vessel or waterfront fires is the need to integrate Coast Guard planning and training efforts with those of other responsible agencies, particularly local fire departments and port authorities. The Captain of the Port (COTP) shall work closely with the municipal fire departments, vessel and facility owners and operators, mutual aid groups and other interested organizations.

8120 Regional and Local Policy

Whether there is a vessel fire or shoreside fire at a waterfront facility, or if there is a fire aboard a vessel that is underway anywhere within the COTP Long Island Sound's Area of Responsibility (AOR), primary responsibility for fire fighting lies with the municipality in whose jurisdiction the facility/vessel lies. The municipal fire department in whose jurisdiction the fire lies will be the Incident Commander (IC) for the fire fighting activities. The IC is responsible for the coordination of all fire fighting activities. Assistance may, and in most cases will, be provided by other municipal fire departments via mutual aid agreements. The state fire marshal's office will address any jurisdictional boundary disputes.

8130 COTP Policy

The two main Coast Guard entities responsible for response to a maritime fire are Coast Guard Captain of the Port/Sector Long Island Sound and Coast Guard Safety Field Office (SFO) Moriches. The Captain of the Port is responsible for providing commercial vessel expertise, knowledge in shipboard firefighting systems, stability, vessel damage control, vessel design and structure, and pollution response. Also, the COTP is tasked with contingency planning for marine firefighting. During an incident, the Unified Command System will be activated to coordinate response to the fire. In general terms, Sector LIS and SFO Moriches are responsible for overseeing the operations of Coast Guard vessels. This includes, but is not limited to, assisting in firefighting activities, conducting search and rescue missions and enforcing safety zones.

MARINE FIREFIGHTING

| res | sponsibilities during a vessel or waterfront facility fire in the COTP Long Island und AOR. | | |
|---|---|--|--|
| | Provide technical assistance to the Incident Commander regarding vessel design, structure, and stability. | | |
| | Procure all available data and information on the vessel and its cargo, which may be of use to the IC in fire fighting and/or salvage operations. | | |
| | Provide coordination for any requested Coast Guard assistance such as vessel traffic control, oil pollution response and hazardous material response. | | |
| | For a shipboard fire, the formal establishment of Unified Command (UC) sections may be needed. These sections are outlined in <u>Section 2000</u> of this plan. Based on the circumstances surrounding the incident, the UC may be established at various locations throughout the COTP zone. | | |
| | e COTP shall also be responsible for fire prevention on board vessels and terfront facilities. To meet these goals, the COTP shall: | | |
| | Inspect foreign and U.S. flag vessels in accordance with applicable Coast Guard policy to ensure that vessels making port calls within the Long Island Sound AOR meet minimum Safety of Life at Sea (SOLAS) and U.S. regulatory requirements. | | |
| | Inspect all waterfront facilities over which the CG has jurisdiction in order to minimize fire hazards. | | |
| | Collaborate with municipal fire departments regarding the results and recommendations of the above inspections. | | |
| Finally, the COTP is tasked with contingency planning. Planning must be a multi-agency, multi-jurisdictional activity. Cooperation among the response agencies during the planning stages is paramount for a successful incident response. Therefore, the COTP shall: | | | |
| | Provide a forum for members of the emergency response community and the maritime industry to improve the Port's readiness to respond to an actual or threatened emergency. | | |
| | Identify and clarify agency roles under the Unified Command System. | | |
| | Identify command, control and communications procedures among the local fire departments, state and federal agencies and other concerned response parties. | | |
| | Develop a wide range of information and data - such as anchorage information, pier data, listings of contact points for local salvage companies, naval architects, etc to assist Incident Commanders in the decision making process during an incident. | | |

MARINE FIREFIGHTING

| Group Commander: | | | | | | |
|---|--|-----|--------------------------------------|--|--|--|
| | Provide suitable Coast Guard vessels (as Commander in combating the fire. | ava | ailable) to assist the Incident | | | |
| | Assume the role of On-Scene Commander (OSC) for all search and rescue (SAR) operations that may be necessary as a result of the incident. | | | | | |
| | If a safety/security zone is activated by the COTP, provide suitable Coast Guard vessels (as available) to enforce the safety/security zone around the burning vessel or facility. | | | | | |
| | Coordinate the activities of all waterside assets not involved in fire fighting such as marine police boats, Coast Guard Auxiliary vessels, etc. | | | | | |
| Non-Federal Responsibility: There are numerous other agencies, parties and individuals whose assistance and expertise will be invaluable in any major maritime incident. The following is a partial listing of the parties who will likely play an important role in an incident. | | | | | | |
| | Vessel owner representative | | Vessel Agent | | | |
| | Municipal Police Department | | Emergency Medical Service | | | |
| | Foreign Consulate | | Pilots | | | |
| | Tug Operators | | Marine Police | | | |
| | Marine Chemists | | Naval Architects | | | |
| | Pollution Cleanup Contractors | | Red Cross | | | |
| | State Fire Marshal's Office | | Army Corps of Engineers | | | |
| | Occupational Safety & Health Administration | | State Emergency Management Agency | | | |

8200 Response Organization

8210 COTP Long Island Sound AOR Fire Response Organization:

In accordance with long-standing Coast Guard policy, the senior local fire department officer at the scene of an incident shall serve as Incident Commander and assume overall command of operational fire fighting response personnel and assets.

While the Coast Guard has an interest in fighting fires involving vessels and waterfront facilities, this interest does not extend to preemption of local responsibility and authority for fire fighting. The Coast Guard traditionally renders assistance as available, commensurate with each unit's level of training and the adequacy of equipment.

MARINE FIREFIGHTING

| | ctors used to develop and implement the Coast Guard's "assistance as ailable" policy include: |
|-----|---|
| | Fire threat level |
| | Capabilities of local fire departments |
| | Jurisdictions involved |
| | Availability and capability of Coast Guard equipment including personnel protective equipment, fire fighting equipment, and ship's stability calculations |
| | Level of training of Coast Guard personnel |
| Tra | aditional response roles for the Coast Guard include: |
| | Restricting access to the affected area and controlling marine traffic by the use of safety/security zones |
| | Conducting Search and Rescue (SAR) activities |
| | Making notifications to local agencies and others, both internal and external to the Coast Guard, able to assist with vessel issues |
| | Coordinating response with local emergency agencies |
| | Coordinating possible oil/hazardous material spill response that may occur as a result of the fire |
| | e Unified Command System will be utilized, as with spill response, to ordinate the joint response to the fire by federal, state, and local agencies. |

8300 Marine Firefighting Scenarios

[NOTE: The scenarios are used to illustrate the type of responses planned within the COTP Long Island Sound]

8310 Passenger Vessel:

8310.1 Scenario:

A passenger/vehicle ferry is enroute from Bridgeport, CT to Port Jefferson, NY and reports an engine room fire while abeam Stratford Shoals light. The vessel has approximately 500 passengers and 20 crewmembers aboard and 65 vehicles. The fire suppression system is ineffective and the fire quickly spreads to the upper decks. The crew abandons the engine room and subsequently the vessels main engines fail.

WX: Spring
Air temp 74 F
Water temp 45 F
Winds SW @ 10 kts
Heavy Fog

MARINE FIREFIGHTING

Typical initial response actions would include:

- * Evaluating the need to evacuate personnel.
- * Once the determination is made to evacuate people, getting them off quickly and safely.
- * Secure the vessel in a suitable location or at anchorage.
- * Set appropriate fire zones to reduce the possibility of the fire spreading and maintain vessel stability.
- * Mount an appropriate response to the fire, including the need to dewater the vessel.

8310.2 Shortfalls:

- 1. Trained personnel: There are no municipal firefighters who have been trained (IAW NFPA 1405) to fight shipboard fires. Funding to pay for this specialized training is the most difficult problem.
- 2. Fire-Fighting Equipment: Large designated fireboats do not exist in this AOR. The City of New Haven owns the "SALLY LEE", a currently decommissioned firefighting vessel, which is not immediately available in the event of an emergency.
- 3. Communications: Multiple radio frequencies may be difficult for the IC to effectively direct all assets on-scene.
- 4. Vessel fire plans are not maintained by responding fire departments. Vessel plans will need to be retrieved from the scene.

8310.3 Scenario:

A passenger vessel at anchor in the East Passage of Narragansett Bay, one half mile west of Goat Island, has an engine room fire. The vessel has approximately 1,000 passengers and 700 crew aboard. The fire suppression system is ineffective and the fire quickly spreads to the upper decks.

WX:

Air temp 74 F Water temp 45 F Winds SW @ 10 Heavy Fog

Typical initial response actions would include:

- * Evaluating the need to evacuate personnel.
- * Once the determination is made to evacuate people, getting them off quickly and safely.
- * Secure the vessel in a suitable location or at anchorage.
- * Set appropriate fire zones to reduce the possibility of the fire spreading and maintain vessel stability.

MARINE FIREFIGHTING

* Mount an appropriate response to the fire, including the need to dewater the vessel.

8320 Tug and Barge in Thames River

8320.1 Scenario:

A tug is pushing a fully loaded tankbarge upstream in the Thames River. The barge is carrying 100,000 barrels of gasoline. The tug loses power and the barge allides with the Interstate 95 Bridge. The barge ruptures three tanks and is impaled on the bridge. Gasoline fumes spread across the river and ignite. The barge cannot be removed from the bridge and burns out of control.

WX: Summer
Air temp 90 F
Water temp 68 F
Winds SW @ 15 kts
Unlimited visibility

Typical initial response actions would include:

- * The Coast Guard would immediately set up safety zones on both sides of the river to restrict access.
- * State and Local Police would secure the bridge traffic until the fire is out and a structural integrity survey is completed.
- * Issuing an Urgent Marine Information Broadcast (UMIB) concerning the situation over VHF radio to advise mariners that the river is closed and solicit for commercial assistance.
- * Consider booming priority protection areas to stop the spreading and pocketing of gasoline.
- * Assist New London or Groton Fire Chief, the likely Incident Commander, in obtaining additional foam to mount an effective response.
- * Involve barge owner. Have them arrange an effective response, including determining equipment needed to remove the barge from the canal.
- * Involve federal, state, and local safety and public health officials to determine public health threats, the need to evacuate personnel and appropriate safety precautions for responders.

8320.2 Shortfalls:

- 1. Similar shortfalls as those noted in the previous scenario. However, additional foam might be needed to put out the tank barge fire if a large amount of product is discharged/engulfed.
- 2. Additionally, responders should realize the added complication posed by potential traffic rerouting and emergency vehicle access as this main highway would be closed pending a structural evaluation.

8330 EQUIPMENT: Capabilities and Shortfalls

MARINE FIREFIGHTING

The following is a listing of Marine Based Firefighting (FF) shortfalls throughout the Sector Long Island sound AOR. The shortfalls have been identified for two scenarios, a marine terminal fire and an incident at the South Shore Long Island Lightering area. The following pages specifically point out the accessibility to pre-identified FF equipment with listed response times for a more detailed analysis.

8330.1 Shortfall for Harbor Areas:

In the major petroleum harbor areas throughout the zone, which include New London, New Haven, and Bridgeport, specific marine firefighting equipment response times are at best six hours. Firefighting pumper trucks and adequate shore based response personnel with sufficient amounts of foam are present in most cases. However, many marine terminals have moorings, which are on piers that are not readily accessible to land-based resources. This presents a problem, as a land-based resource could not effectively fight a fire at a Tank Barge/Tank ship which is tied up to the dock. The specific shortfalls have been identified:

- 1) Slow response times of Marine FF boats due to location outside the AOR.
- 2) No resources are immediately available to effectively address a large fire from a barge or ship during cargo transfers at a pier.

8330.2 Shortfalls for Lightering Area South Shore Long Island

The lightering area specifically south of Long Island presents an entirely different scenario from the marine terminal situation within the harbor areas. However, the shortfalls are similar in that response times to the incident are approximately 4 to 5 hours. If the equipment was to arrive within specified response times, only a limited amount of FF foam is available from the contracted resources. Based upon this, the following shortfalls have been identified:

- 1) Slow response times for Marine FF boats due to location outside the AOR.
- 2) Limited amount of foam available from the contracted resources.
- 3) Limited amount of Marine FF personnel are currently available for a long-term fire, which could last more than two days.

8400 Marine Firefighting Resources

<u>General</u>. Regional fire chiefs are fully aware of available firefighting resources. If an incident exceeds the capabilities of a particular fire department, the fire chief will utilize their existing mutual aid agreements to alleviate the shortfall.

8410 Port/Harbor Area: Coast Guard Assets

The following spreadsheet identifies Coast Guard firefighting resources within the Sector Long Island Sound Area of Responsibility (AOR).